



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/734,448	12/12/2003	Que Thuy Tran	7324-US	9695

7590 05/13/2005

Thomas F. Lenihan
TEKTRONIX, INC.
M/S 50-LAW
P.O. Box 500
Beaverton, OR 97077-0001

EXAMINER

HOLLINGTON, JERMELE M

ART UNIT	PAPER NUMBER
----------	--------------

2829

DATE MAILED: 05/13/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/734,448

Applicant(s)

TRAN ET AL.

Examiner

Jermele M. Hollington

Art Unit

2829

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 12 December 2003.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-14 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-14 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Specification

1. Applicant is reminded of the proper language and format for an abstract of the disclosure.

The abstract should be in narrative form and generally limited to a single paragraph on a separate sheet within the range of 50 to 150 words. It is important that the abstract not exceed 150 words in length since the space provided for the abstract on the computer tape used by the printer is limited. The form and legal phraseology often used in patent claims, such as "means" and "said," should be avoided. The abstract should describe the disclosure sufficiently to assist readers in deciding whether there is a need for consulting the full patent text for details.

The language should be clear and concise and should not repeat information given in the title. It should avoid using phrases which can be implied, such as, "The disclosure concerns," "The disclosure defined by this invention," "The disclosure describes," etc.

2. The abstract of the disclosure is objected to because the abstract is not within 50 to 150 words as describe above. Correction is required. See MPEP § 608.01(b).

Double Patenting

3. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

4. Claims 1 and 4 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1 and 14-15 of copending Application No. 10/323,503. Although the conflicting claims are not identical, they are not

Art Unit: 2829

patentably distinct from each other because it would have been obvious to include external trigger input with each of the test and measurement instrument of the this application since the both instrument in this case include in Fig. 1 a trigger circuit inside the instrument.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

The following is the relationship between both applications: claim 1 of this application is similar to claim 1 of U.S. Application No. 10/323,503 and claim 4 of this application is similar to claims 14 and 15 of U.S. Application No. 10/323,503.

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

6. Claim 1-14 are rejected under 35 U.S.C. 102(e) as being anticipated by Tan et al (6812688).

The applied reference has a common assignee with the instant application. Based upon the earlier effective U.S. filing date of the reference, it constitutes prior art under 35 U.S.C.

102(e). This rejection under 35 U.S.C. 102(e) might be overcome either by a showing under 37 CFR 1.132 that any invention disclosed but not claimed in the reference was derived from the inventor of this application and is thus not the invention “by another,” or by an appropriate showing under 37 CFR 1.131.

Regarding claim 1, Tan et al disclose [see Fig. 1] a system for triggering a plurality of test and measurement instruments (acquisition units 120₁ and 120₂) substantially simultaneously, comprising: a first test and measurement instrument (acquisition unit 120₁) having a first input (left side of 120) for receiving a signal under test (DATA1), an output (right side of 120) for developing a trigger enable signal (AS₁), and an input (bottom of 120) for receiving a combined trigger signal (T), a second test and measurement instrument (acquisition unit 120₂) having a first input (left side of 120) for receiving a signal under test (DATA2), an output (right side of 120) for developing a trigger enable signal (AS₂), and an input (bottom of 120) for receiving a combined trigger signal (T), and circuitry (combination of processing and display unit 130 and trigger circuit 140) for logically combining said trigger enable signals (AS1 and AS2) of said first and second test and measurement instruments (1201 and 1202) to generate said combined trigger signal (T), wherein each of said test and measurement instruments (1201 and 1202) is coupled to said circuitry (130 and 140) for combining via a cable connecting a respective pair of transceivers (combination of 132, 134, 136 and 138), and said trigger enable signal (AS1 and AS2) and said combined trigger signal (T) are conveyed in mutually opposite directions through said cable; and said first and second test and measurement instruments (1201 and 1202) acquiring data samples (DATA1 and DATA2) of said signals under test (DATA1 and DATA2) in response to said combined trigger signal (T).

Regarding claim 2, Tan et al disclose said transceivers (132, 134, 136 and 138) comprise: a series combination of a variable impedance device (132, 134, 136 and 138), a switch (switch 142) and a constant current source (input unit 160); wherein: the junction of said variable impedance device (132, 134, 136 and 138) and said switch (142) is adapted to effect

Art Unit: 2829

transmission of at least one of said trigger enabled signal (AS1 and AS2) and said combined trigger signal (T).

Regarding claim 3 Tan et al disclose the junction of said variable impedance device (132, 134, 136 and 138) and said switch (142) is monitored to effect reception of at least one of said trigger enabled signal (AS1 And AS2) and said combined trigger signal (T).

Regarding claim 4, Tan et al disclose [see Fig. 1] a system comprising: a plurality of signal acquisition devices (acquisition units 120₁ and 120₂), each of said signal acquisition devices (1201 and 1202) comprising an event decoder [not number but see col. 2, lines 63-65 and col. 4, lines 7-9], for monitoring at least one respective input signal (DATA1 and DATA2) to determine whether a logical triggering event has occurred, and a transceiver (processing and display controller 130), for transmitting indicium of the occurrence of said logical triggering event and for receiving a trigger signal (AS1 and AS2), and a trigger controller (trigger circuit 140), comprising a plurality of transceivers (144) operative to receive said logical triggering event indicia transmit said trigger signal (T), and a logical processing device (processing controller 130) for combining said logical triggering event (AS1 And AS2) indicia to produce therefrom said trigger signal (T).

Regarding claim 5, Tan et al disclose said transceivers (132, 134, 136 and 138) comprise: a series combination of a variable impedance device (132, 134, 136 and 138), a switch (switch 142) and a constant current source (input unit 160); wherein: the junction of said variable impedance device (132, 134, 136 and 138) and said switch (142) is adapted to effect transmission of at least one of said trigger enabled signal (AS1 and AS2) and said combined trigger signal (T).

Regarding claim 6, Tan et al disclose the junction of said variable impedance device (132, 134, 136 and 138) and said switch (142) is monitored to effect reception of said triggering signal (T).

Regarding claim 7, Tan et al disclose said constant energy source (160) comprises a constant current source; and said variable impedance device comprises a transistor (144).

Regarding claim 8, Tan et al disclose an apparatus, comprising: an event decoder (acquisition units 120₁ and 120₂), for monitoring at least one input signal (DATA1' or DATA2') to determine whether a logical triggering event has occurred, and a transceiver (combination of processing and display unit 130 and trigger circuit 140), for transmitting indicium of the occurrence of said logical triggering event and for receiving a trigger signal (AS1 and AS2).

Regarding claim 9, Tan et al disclose an acquisition unit (1201 or 1202), for acquiring a plurality of data samples (DATA1' or DATA2') from said at least one input signal (DATA1 or DATA2) in response to said trigger signal (T).

Regarding claim 10 Tan et al disclose said transceivers (132, 134, 136 and 138) comprise: a series combination of a variable impedance device (132, 134, 136 and 138), a switch (switch 142) and a constant current source (input unit 160); wherein: the junction of said variable impedance device (132, 134, 136 and 138) and said switch (142) is adapted to effect transmission of at least one of said trigger enabled signal (AS1 and AS2) and said combined trigger signal (T).

Regarding claim 11, Tan et al disclose the junction of said variable impedance device (132, 134, 136 and 138) and said switch (142) is monitored to effect reception of said triggering signal (T).

Regarding claim 12, Tan et al disclose said constant energy source (160) comprises a constant current source; and said variable impedance device comprises a transistor (144).

Regarding claim 13, Tan et al disclose said apparatus is used in each of a plurality of signal acquisition devices (1201 and 1202), each of said plurality of signal acquisition devices (1201 and 1202) using its respective transceiver (130 and 140) to transmitting respective indicia of logical triggering events and to receive said trigger signal (T).

Regarding claim 14, Tan et al disclose each signal acquisition device transceiver (1201 and 1202) communicates with a corresponding transceiver (130 and 140) in a trigger controller (140), said trigger controller (140) logically combining said indicia of logical triggering events (AS1 and AS2) to produce said trigger signal (T).

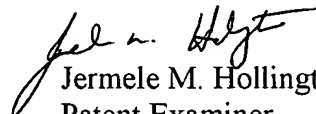
Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jermele M. Hollington whose telephone number is (571) 272-1960. The examiner can normally be reached on M-F (9:00-4:30 EST) First Friday Off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nestor Ramirez can be reached on (517) 272-2034. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Art Unit: 2829

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


Jermele M. Hollington
Patent Examiner
Art Unit 2829

JMH
May 11, 2005